

Project Management Plan – Navigational Improvements – False Pass, Alaska

1.0 Work Scope

1.1 Introduction

Purpose. This is the Project Management Plan (PMP) for the Navigation Improvements, False Pass, Alaska project. This PMP provides management information for the design and construction of the recommended and approved plan for the project.

Key Partners. The Aleutians East Borough is the project Sponsor. Local citizens have been actively involved in the identification of navigation needs. The recommended plan was developed in close coordination with the Sponsor and users of the existing navigation system. Representatives of the National Marine Fisheries Service (NMFS), and the U.S. Fish & Wildlife Service (USFWS) met with the Corps of Engineers to discuss impacts. The environmental impacts are not expected to be significant, and are discussed in the Environmental Assessment (EA).

Project Features. The Feasibility Report, submitted in December 2000, recommends Navigation Improvements to be made at False Pass, Alaska and that specifically, Alternative 1-E the locally preferred plan as described in the Feasibility Report be constructed. Alternative 1-E consists of the of the following components:

Breakwater. The 388 m-long north rubblemound breakwater will protect the basin from waves from the northeast and east. Maximum depths of water are -7.5 m MLLW. The 180 m-long south rubblemound breakwater would form the southern limit of the entrance channel. The south breakwater would be in maximum depths of approximately -10 m MLLW. Foundation materials are sand and gravel, which would serve as a suitable base for the rubblemound structures. The breakwaters will have a crest elevation of 4.0 m MLLW and a crest width of 2.4 m.

Navigation Channel and Basin. The project would accommodate a fleet of 88 vessels in a 2.1 ha basin protected by two rubblemound breakwaters. The mooring basin can accommodate boats ranging in size from 5.5 m to 30.5 m. The entrance channel is 30 m wide, which is three times the design beam width of the longest boat at 30.5 m. The entrance channel width allows for one-way traffic and will be sufficient for larger vessels equipped with bow thrusters. The entrance channel depth would be -6.1 m MLLW. Basin depths would range from -5.8 m MLLW near the entrance channel to -3.7 m MLLW at the far end of the basin.

Betterments. Major construction items include expansion of the south breakwater to a causeway, sheetpile dock, and bridge. The causeway and dock would allow deep-draft barges (100 m in length) to load and unload goods from upland facilities. A bridge would be required to access the causeway from the upland due to the gap created by the detached breakwater.

A detailed discussion of the recommended plan and the alternatives considered is included in the Navigation Improvements, Feasibility Report and Environmental Assessment, False Pass, Alaska, dated December 2000.

1.2 Description of Work

This PMP describes those elements needed to produce the plans and specifications for the authorized project, and award the construction contract. The Feasibility Report will serve as the basis for design. Design and construction will be in accordance with the project as authorized in Section 101(b)(1) of the Water Resources and Development Act of 2000.

2.0 Work Breakdown Structure

The work breakdown structure (WBS), a product-oriented hierarchy of the scope of work, provides a system for organizing the scope in a logical manner. A WBS is provided for the project. The WBS is in the following format:

TABLE 1.

Work Breakdown Structure

| | |
|---------|--|
| Level 1 | Final Navigational Improvements Plans and Specifications |
| Level 2 | Major Elements of Design |
| | Design Agreement |
| | Plans and Specifications |
| | Project Cooperation Agreement (PCA) |
| | Acquisition |
| Level 3 | Elements Subordinate to Level 2 Major Elements |
| | Components of the Design Agreement |
| | Develop a detailed scope of work |
| | Develop a detailed cost estimate |
| | Develop and negotiate the Design Agreement |
| | Complete the Design Agreement checklist |

Work Breakdown Structure

TABLE 1.

Work Breakdown Structure

| | |
|--|---|
| | Develop a detailed Project Management Plan |
| | Obtain legal certification |
| | Submit the Design Agreement to POD for approval |
| | Components of Plans and Specifications |
| | Perform value engineering |
| | Geotechnical Investigations |
| | Develop draft Plans and Specifications |
| | Develop draft Dredge Disposal Design |
| | Perform technical review of draft designs |
| | Develop quantity and cost estimate |
| | Finalize Plans and Specifications |
| | Perform BCOE review |
| | Develop bid package |
| | Components of the PCA |
| | Complete draft PCA |
| | Review of draft document |
| | Obtain construction funding |
| | Negotiate the PCA |
| | Legal review of PCA |
| | Submit PCA for HQ review |
| | Renegotiate PCA package and Finalize |
| | Sign PCA |
| | Components of Acquisition |
| | Real Estate Acquisition and Certification |
| | Escrow Agreement |
| | Construction Contract Advertised |
| | Construction Contract Awarded/NTP |
| | Construction |

3.0 Schedules

The summary project schedule is shown below. Major milestone dates are as follows. Those shown in bold are mandatory upward reportable.

TABLE 2.

| Name | Start | Finish |
|--|--------------|---------------|
| Design Agreement | | |
| FONSI Signed | 9/29/00 | 9/29/00 |
| Final Feasibility Report Submitted | 12/8/00 | 12/8/00 |
| Division Engineers Notice | 10/4/00 | 10/4/00 |
| Execute Design Agreement | 3/23/01 | 3/23/01 |
| Plans and Specifications | | |
| Value Engineering | 5/__/01 | 5/__/01 |
| Soil Sampling | 3/23/01 | 7/2/01 |
| Develop Draft Plans and Specifications | 6/1/01 | 11/1/01 |
| Develop Draft Dredge Disposal Design | 6/1/01 | 11/1/01 |
| Quantity Takeoffs and Estimates | 6/1/01 | 6/30/01 |
| Technical Review of Draft Designs | 11/1/01 | 11/30/01 |
| Prepare Final Plans and Specifications | 12/3/01 | 1/1/02 |
| Final Quantities and Estimates | 1/1/02 | 1/30/02 |
| BCOE Review/Certification | 1/1/02 | 1/30/02 |
| Complete Plans and Specifications | 1/1/02 | 1/30/02 |
| Project Cooperation Agreement | | |
| Appropriate Construction Funds | 10/01/01 | 10/01/01 |
| Prepare & Pre-negotiate PCA/Finance Plan | 3/1/01 | 9/3/01 |
| Review PCA/Finance Plan | | 9/3/01 |
| Conclude PCA Negotiations | 9/3/01 | 9/28/01 |
| HQUSACE Rev.- PCA/Fin. Plan | 9/28/01 | 10/31/01 |
| ASA(CW) Rev.-PCA/Fin. Plan | 10/31/01 | |
| Execute PCA | 1/1/02 | 1/30/02 |
| Acquisition | | |
| Real Estate Acquisition/Certification | 9/3/01 | 2/28/02 |
| Prepare/Negotiate Escrow Agreement | 1/30/02 | 2/28/02 |
| Construction Contract Advertised | 2/28/02 | 3/28/02 |
| Construction Contract Award | 4/30/02 | 4/30/02 |
| Construction | 6/15/02 | 10/31/03 |

4.0 Project Cooperation Plan

The Project Cooperation Plan is represented by the Design Agreement and the Project Cooperation Agreement (PCA) described in this section. It is USACE policy that design activities be cost shared and funded concurrently by non-Federal sponsors. Districts must execute a Design Agreement with a sponsor prior to initiating design work or issuing a solicitation for a contract for design work. District commanders are authorized to approve and execute design Agreements based on the model when the agreement does not deviate from the model and optional language. A 30-day written notification prior to execution of the Design Agreement must be submitted to POD, along with a Design Agreement checklist and certification by Office of Counsel. A sponsor letter of intent must accompany the 30-day written notification indicating capability and willingness to provide funds for design work in a timely manner.

A PCA is required for all new construction starts. The PCA must be executed between the sponsor and the Assistant Secretary of the Army for Civil Works (ASA[CW]) or his designee prior to advertisement of the construction contract for the project. The model PCA for harbor projects (appendix D of ER 1165-2-131) will be used for this project. The draft PCA will be provided to the sponsor during design phase.

The Aleutians East Borough has submitted its plan to finance the non-Federal share of the project, which includes the breakwaters and the inner harbor facilities. The city has the authority and capability to issue revenue bonds, and anticipates that State grant money will be available for part of the construction to pay the local share of the construction costs. Funds required for project construction will be paid to the Government, as agreed upon in the PCA. Since land acquisition and disposal areas are required for the project, the city will receive credit for lands, easements, rights-of-way, relocations, and disposal sites (LERRD).

The Aleutians East Borough and the City of False Pass have been and will continue to be closely involved in the development and construction of the navigation improvements. City representatives will participate actively in the Design Coordination Team activities. Its city engineer (or his designee) will review and comment on the plans and specifications for the construction contract. The City will acquire all the lands needed for project construction.

The General Navigation Features are estimated to cost \$10,596,000. The sponsor will contribute 10% of the GNF costs plus 100% of the local costs and LERRDS, \$1,059,600 during construction, and reimburse the Corps an additional 10% minus real estate costs after construction.

5.0 Acquisition Plan

The navigation improvements for False Pass will be constructed using one contract. At this point the contract is scheduled to be advertised as a traditional Invitation for Bids. The use of an Request for Proposal solicitation will be considered during preparation of plans and specifications.

The contract will be advertised and awarded within 6 months of signing the PCA. Physical construction of the breakwaters would likely not commence until the summer of 2002 and would take about 18 months to complete.

6.0 Change Management Plan

If a requirement for a project change is identified, the requirement and its cost will be described and routed via email to the project manager for review, approval, and a funding increase, if required.

7.0 Real Estate Plan

Real estate requirements anticipated for the federal project are: (1) permanent easements for breakwater tie-ins and excavation of uplands for entrance and maneuvering channels, (2) temporary easements for construction and staging areas. Temporary easements will be for 2 years. It is anticipated that a non-standard estate will be required for the property interests needed from the USFWS. While it is expected that the necessary property interests from USFWS will be conveyed at no cost, the acquisition process may take up to 6 months and require assistance from the District. No interest is required for lands below mean high water as these areas are subject to the Federal right of navigation servitude. It is not anticipated that relocation assistance benefits IAW Public Law 91-646 will be required for this project. A schedule of 4 to 6 months is estimated to complete acquisition and certification of all real estate required for project construction. The real estate costs for the GNF portion of the project are shown in the table below. Only those lands required for the GNF of the project are eligible for credit as LERRD under Section 101 of Public Law 99-662.

TABLE 3.

Real Estate Costs

| Item | Federal (\$) | Local (\$) | Subtotal (\$) | Total (\$) |
|--------------------------------|--------------|------------|---------------|------------|
| Federal project portions (GNF) | | | | |
| Administration | 15,000 | 25,000 | 40,000 | |
| Lands | 0 | 170,000 | 170,000 | 210,000 |

8.0 Value Engineering Plan

Section 911 of PL 99-662 requires that a review of the cost-effectiveness of design be conducted for each water resources project with a cost exceeding \$10,000,000. The cost of the general navigation features for False Pass are greater than \$10,000,000, so a Section 911 certificate will be required. The Corps of Engineers also requires a Value Engineering study for all projects exceeding \$2,000,000 in cost. Consequently, a Value Engineering study will be conducted for the engineering design of the project after it has been authorized.

A Value Engineering study analyzes the planned design, and determines if there are alternative designs that will offer the Government greater benefit. Increased benefit can come through a reduction in overall cost, increase in the quality of construction at no additional cost, or a combination of the two. All alternatives must meet all authorized project requirements. Therefore, alternatives for the Navigation Improvements Project must provide adequate wave protection for the fleet in the navigation portion of the

project, as well as being environmentally and socially acceptable. Alternative 1-E as presented in the Feasibility Study Report dated December 2000 is environmentally acceptable and has the support of the local sponsor. Based on these considerations, Alternative 1-E is the preferred and authorized plan for construction.

The study will be conducted at the Alaska District after the Design Agreement is executed and before preparation of plans and specifications is significantly underway. The results of the study will then be able to be incorporated into the plans and specifications and will serve as a check point to update the PMP.

9.0 Project Delivery Team Members

TABLE 4.

The PDT constitutes the Design Coordination Team required by the Design Agreement.

| Position | Name | Office Symbol/Address | Phone | Fax |
|-------------------|---------------------|------------------------------|--------------|------------|
| Sponsor | Robert Juettner | Aleutians East Borough | 443-6600 | 443-5349 |
| Project Manager | David A. Martinson | CEPOA-PM-C | 753-5704 | 753-2679 |
| Engineering | Elaine L. Pflugh | CEPOA-EN-CW-HH | 753-5706 | 753-2625 |
| Construction | Ronald Flodin | CEPOA-CO-SA-AR | 753-5550 | 384-7440 |
| Contracting | Gail M. West | CEPOA-CT-CO-M | 753-2551 | 753-2544 |
| Realty Specialist | Linda S. Arrington | CEPOA-RE-RS-AQ | 753-2849 | 753-1836 |
| Counsel | Phillip E. Santerre | CEPOA-OC | 753-2537 | 753-2530 |
| Soils and Geology | Charles R. Wilson | CEPOA-EN-ES-SG | 753-2687 | 753-2688 |
| Envir. Resources | Lizette P. Boyer | CEPOA-EN-CW-ER | 753-2637 | 753-2625 |
| Cost Estimator | Al Arruda | CEPOA-EN-ES-CE | 753-5679 | 753-5678 |
| Value Engineer | Kerry E. Walker | CEPOA-EN-TE (VE) | 753-5725 | 753-5701 |

Statement of Agreement. The undersigned agree to follow the provisions of this Project Management Plan (PMP). Each activity will focus its efforts and influence to provide comprehensive, up-front planning and to meet the objectives of designing and constructing this project to fulfill sponsor needs and to meet quality, safety and reliability expectations, with minimum changes, within budget, and within schedule. Changes to scope, schedule, costs, strategy, or Project Delivery Team members included in this plan must be coordinated with and approved by the undersigned or their designated representatives, and fully documented.

| | |
|---------------------------------|------|
| Scott R. Bearden | Date |
| Deputy District Engineer | |
| Programs and Project Management | |

Robert S. Juettner _____ Date _____
Sponsor

Kenneth J. Eisses
Engineering Member

David A. Martinson _____ Date _____
Project Manager

Project Management Agreement

| | Schedule Item/Task | Task Participant | | | | | | | | | | | | | | | |
|-------|---------------------------------|------------------|-----|----|----|-----|----|----|----|----|----|----|----|----|----|----|--|
| | | SPR | H&H | PF | ER | SVY | SG | CE | SP | VE | QA | CO | RE | CT | PM | OC | |
| | Initiate PED Phase | | | | | | | | | | | | | | | | |
| | Update PMP | | | | | | | | | | | | | | | | |
| | Negotiate DA | | | | | | | | | | | | | | | | |
| 220-F | Submit PED Pkg. to POD | | | | | | | | | | | | | | | | |
| 250-F | PED Pkg. Approved | | | | | | | | | | | | | | | | |
| 290-F | Execute PED Agreement | | | | | | | | | | | | | | | | |
| 330-F | Chief's Report | | | | | | | | | | | | | | | | |
| | Project Management | | | | | | | | | | | | | | | | |
| 350-F | Authorization | | | | | | | | | | | | | | | | |
| | EDA Coordination | | | | | | | | | | | | | | | | |
| | Bird Surveys | | | | | | | | | | | | | | | | |
| | Geotechnical Investigations | | | | | | | | | | | | | | | | |
| | Value Engineering | | | | | | | | | | | | | | | | |
| | Design Refinement (VE) | | | | | | | | | | | | | | | | |
| 500-F | Draft Plans and Specs. | | | | | | | | | | | | | | | | |
| | Current Working Estimate | | | | | | | | | | | | | | | | |
| | Technical Review | | | | | | | | | | | | | | | | |
| 580-F | BCOE Review | | | | | | | | | | | | | | | | |
| 590-F | Finalize Plans and Specs. | | | | | | | | | | | | | | | | |
| | Negotiate PCA | | | | | | | | | | | | | | | | |
| 620-F | PCA Submitted for Approval | | | | | | | | | | | | | | | | |
| 650-F | PCA Approved | | | | | | | | | | | | | | | | |
| 690-F | PCA Executed | | | | | | | | | | | | | | | | |
| | RE Acquisition | | | | | | | | | | | | | | | | |
| | Certification of RE | | | | | | | | | | | | | | | | |
| L10-S | Receive Construction Funds | | | | | | | | | | | | | | | | |
| | CBD Announcement (Inv. to Bid) | | | | | | | | | | | | | | | | |
| | Government Estimate | | | | | | | | | | | | | | | | |
| 950-F | Advertise Construction Contract | | | | | | | | | | | | | | | | |
| | Bid Opening | | | | | | | | | | | | | | | | |
| 960-F | Award Contract | | | | | | | | | | | | | | | | |
| | Construction Contract Mgmt. | | | | | | | | | | | | | | | | |
| | LERRD Crediting | | | | | | | | | | | | | | | | |
| | NTP | | | | | | | | | | | | | | | | |
| | Initiate Construction | | | | | | | | | | | | | | | | |
| 990-F | Complete Construction | | | | | | | | | | | | | | | | |
| | Quarterly PDT Meetings | | | | | | | | | | | | | | | | |

TABLE 1. False Pass PED Budget

| | FY01 | FY02 | FY03 | TOTAL |
|-------------------------|-------------|-------------|-------------|--------------|
| Project Management | 38,700 | 10,800 | - | 49,500 |
| EN-CW | 161,480 | 95,188 | - | 256,668 |
| Plan Formulation | 10,520 | 1,440 | | 11,960 |
| Hydraulics & Hydrology | 105,567 | 86,148 | | 191,715 |
| Environmental Resources | 45,393 | 7,600 | | 52,993 |
| EN-ES | 209,092 | 26,596 | | 235,688 |
| Cost Estimating | 13,645 | 7,380 | | 21,025 |
| Soils and Geology | 147,320 | 3,216 | | 150,536 |
| Specifications | 25,462 | 10,000 | | 35,462 |
| Survey | 14,432 | 2,000 | | 16,432 |
| BRANCH | 8,234 | 4,000 | | 12,234 |
| EN-TE | 25,400 | | | 25,400 |
| Value Engineering | 25,400 | | | |
| Construction | 4,500 | 8,300 | | 12,800 |
| Contracting | 2,000 | 10,000 | | 12,000 |
| Real Estate | 3,080 | 14,960 | - | 18,040 |
| 10% contingency | 20,368.00 | 7,969.60 | | 28,337.60 |
| | 464,620 | 173,814 | total | 638,434 |
| ESA coordination | 50,000 | 60,000 | | 110,000 |
| | | | | 748,434 |
| | | | round up | \$750,000 |

| | Schedule Item/Task | FY01 | | | | | | | | | | | | FY02 | | | | | | | | | | | | FY03 | | | | | | | | | | | | FY04 | | | | | | | | | | | |
|-------|---------------------------------|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|
| | | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S |
| | Initiate PED Phase | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Update PMP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Negotiate DA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 220-F | Submit PED Pkg. to POD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250-F | PED Pkg. Approved | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 290-F | Execute PED Agreement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 330-F | Chief's Report | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 350-F | Authorization | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | EDA Coordination | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bird Surveys | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Geotechnical Investigations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Value Engineering | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Design Refinement (VE) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500-F | Draft Plans and Specs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Current Working Estimate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Technical Review | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 580-F | BCOE Review | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 590-F | Finalize Plans and Specs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Negotiate PCA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 620-F | PCA Submitted for Approval | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 650-F | PCA Approved | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 690-F | PCA Executed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RE Acquisition | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Certification of RE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L10-S | Receive Construction Funds | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CBD Announcement (Inv. to Bid) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Government Estimate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 950-F | Advertise Construction Contract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bid Opening | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 960-F | Award Contract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Construction Contract Mgmt. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LERRD Crediting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NTP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |